

## BRIEF COMMUNICATION

### FIRST FOSSIL RECORD OF THE HYLID FROG *LITORIA RANIFORMIS* (KEFERSTEIN)

The Australian hylid frog *Litoria raniformis* (Keferstein) is a member of a group of similar species known as the *L. aurea* complex<sup>1</sup>, and is one of the largest species in Australia<sup>2</sup> (snout to vent length up to 104 mm). The geographic range of the species extends from South Australia through Victoria, the ACT and Tasmania to eastern New South Wales<sup>3</sup>. The species also has been introduced into New Zealand and has become established there<sup>4</sup>.

It has been a source of surprise that such a large species seemingly is absent from Holocene and Pleistocene sites in south-eastern Australia where other extant sympatric species have been found in abundance<sup>5</sup>.

Here we report the first specimens of *L. raniformis* from the fossil record. The ilial descriptive terminology follows Tyler<sup>6</sup>.

The largest and most complete specimen is a left ilium, located in March 1995, from material extracted at the 'East Low' site at Henschke's Cave, SA (Lat. 36°58'-06, Long. 140°45'-58). The specimen has been deposited in the palaeontological collection at the South Australian Museum and registered as SAM P35305. The specimen has a length of 28.0 mm which is less than the known maximum ilial length of the species (35 mm)<sup>5</sup>. However, it is larger than other Pleistocene frog ilia known from the area and its identification has been confirmed by comparison with extant specimens, an example of which is shown in Fig. 1. SAM P35305 is fragile and partly encrusted with matrix, hence the extant specimen is more useful for identification purposes. A line drawing of the sectional form of the ilium of this species has been published elsewhere<sup>7</sup>.

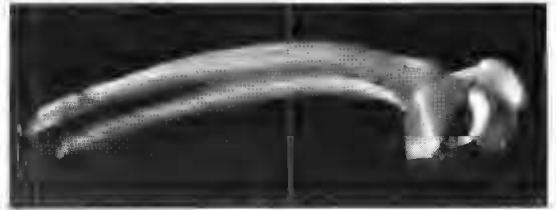


Fig. 1 Pelvis of extant *Litoria raniformis* from left, lateral aspect. Length of ilium = 31 mm. (Photo: P. Kempster).

Salient features are the poorly developed dorsal prominence and dorsal protuberance, only slight elevation of the dorsal acetabular expansion, a narrow and gently curved pre-acetabular zone and a shallow longitudinal indentation upon the lateral surface of the ilial shaft.

We refer two other partial ilia from Henschke's Cave to this species: SAM P32249 and P35306.

The age of the deposit has been estimated to be from 35,000<sup>8</sup> to 100,000<sup>9</sup> years. These papers, provide information on the depositional nature and stratigraphic sequence of the material.

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<sup>1</sup>Tyler, M. J. & Davies, M. (1978) Aust. J. Zool. Suppl. 63, 1-47.

<sup>2</sup>Tyler, M. J. (1978) "Amphibians of South Australia" (Handbooks Committee, Adelaide).

<sup>3</sup>Tyler, M. J. (1994) "Australian frogs. A natural history" (Reed, Melbourne).

<sup>4</sup>McCann, C. (1961) Tuatara, 8(3), 107-120.

<sup>5</sup>Tyler, M. J. (1977) Trans. R. Soc. S. Aust. 101(3), 85-89.

<sup>6</sup>Tyler, M. J. (1976) *Ibid.* 101(1) 3-14.

<sup>7</sup>Tyler, M. J. (1986) Alcheringa 10, 401-402.

<sup>8</sup>Pledge, N. S. (1981) *Ibid.* 105(1), 41-47.

<sup>9</sup>Barrie, D. J. (1990) Mem. Qld Mus. 28(1), 139-151.